



Bear Spray

► Fact Sheet



Bear spray can be an effective addition to other safety precautions when you're travelling in bear country. But it must be used properly and in combination with other measures. Bear spray is not your best defence; your best defence is your brain. Become informed about bears and their habits. Understand all of your safety equipment, including bear spray, and practice with it before venturing into bear country.

Bear Spray Composition and Effects

Bear spray, also known as pepper spray, is a combination of a propellant and an active ingredient called oleoresin capsicum. Oleoresin capsicum (OC) is usually derived from cayenne pepper, one of the hottest peppers in the world. It is an inflammatory agent that, upon contact with mucous membranes, causes immediate dilation of the capillaries. It can cause burning, tearing, and swelling in the eyes and nose, and instant inflammation of throat and lung tissues, which temporarily restricts breathing to short shallow gasps. OC can also create an intense burning sensation on the surface of the skin. The effects usually last from 15 to 60 minutes. However, OC causes no permanent damage to people or bears.

Behaviour in Bear Country

Bear spray is a last-resort device. Your best defence is to avoid any encounter with a bear. Precautions you should take in bear country:

- **Never intentionally feed a bear.**
- **Never cook, eat, or store food in a tent.**
- Keep your campsite clean. Avoid burning food scraps or letting fat drip into the fire.
- Keep food and toiletries (including toothpaste, deodorant, sunscreens, soap, shampoo, and anything scented such as makeup or feminine hygiene products) in the trunk of a vehicle. Use a bear cache, or hang your food at least four meters off the ground between two trees, well away from your camp.
- Be alert for bears and signs of bear activity (bear scat) in case previous campers have attracted them. Bears are creatures of habit; even when an attractant has been removed, it may take several days or weeks for them to stop visiting a particular area.
- Avoid pitching your tent near a natural food source, such as berry patches, or rivers or creeks during fish spawning season.
- Have your bear spray readily accessible at all times (on your belt, not in your pack).

To reduce the chance of a surprise encounter with a bear:

- Make noise when travelling on trails or through the bush.
- Avoid wearing perfume or other scented products such as deodorants, scented sunscreens, or bug repellents.
- Be aware of your surroundings. Watch and listen for signs of bears.
- Be very careful and alert when crouching over for extended periods of time.
- Travel in groups, not alone.

If you do encounter a bear:

- Face the bear. Don't run. Bears run much faster than humans.
- If the bear is not threatening you, back away slowly, providing an open escape route for the bear.
- Keep dogs away from bears. A dog can excite a bear, which may then follow the dog back to the owner.
- Don't climb a tree. Most bears climb trees faster and better than humans.



If you are charged or attacked:

- Don't panic.
- Stand your ground and get your pepper spray ready. Sometimes a bear will make several bluff charges. Do not use your pepper spray unless you are sure the bear is not bluffing.
- If the bear stops after a bluff charge, slowly wave your arms. Talk softly and back away slowly.
- If the bear doesn't stop, use your pepper spray. (You must have read and understood the manufacturer's instructions, and practised with the spray beforehand.)

If spray does not stop the bear, the recommended response varies:

- If it is a grizzly, play dead. Most experts recommend that you lie flat on your stomach with your hands clasped behind your neck. Remain silent. Leave your pack on for additional protection.
- If it is a black bear, do NOT play dead. Do whatever you can to fight off the bear. As an exception to this rule, if you are positive you are facing a mother bear with cubs, and contact is imminent, you should play dead.
- If a bear of any type keeps biting you for a prolonged period of time, or if you are convinced it is feeding on you, fight back. Never play dead if you know that a bear is preying on you (e.g., if it attacks you in your tent).



First Aid Treatment for Bear Spray

Anyone who's been accidentally sprayed should be moved from the contaminated area to fresh air as quickly as possible. They should stay still, breathe normally, and relax. Most major effects of the spray should dissipate in 30 to 45 minutes. To help relieve discomfort sooner, flush exposed areas with cool water and, if possible, use soap. You can also wash affected areas with vegetable-based oil, then remove the oil with denatured alcohol. Don't rub washed areas; pat them dry with a towel.

To flush spray out of your eyes, place your head under water and open your eyes every few seconds. Do not rub your eyes! Remove contact lenses and affected clothing (they will need to be disposed of or thoroughly cleaned). Do not apply lotions or creams as they can trap the pepper against the skin. Wet towels and ice packs can also be used to reduce inflammation.

If a victim continues to show signs of physical distress such as chest pains, cold sweats, or shallow breathing past the usual 45-minute recovery time (this can be the case with asthmatics), seek medical attention immediately.

Other Considerations

The active ingredient, extracted from cayenne peppers, is the same pepper that makes spicy foods so tasty. Bears also like the taste of cayenne (in small doses). Never try to use bear spray as a bear repellent by spraying it on people, or items such as tents or packs. Anything that has been accidentally sprayed should be washed as soon as possible. The nozzle of the spray can should also be cleaned after use.

Although bear spray is legal to sell and carry, it is illegal to use for any purpose other than defending yourself from animal attack. You should never spray it at or around any other person. If practising with bear spray, stay well away from others, and spray downwind to avoid painful blow-back.

It is illegal to carry bear spray on board a commercial aircraft. Consult with the pilot if you need to transport the spray on a small plane or helicopter.

Learn More

Knowing more about bears will enhance your safety. It will also increase your appreciation of the powerful forces of nature, and make your wilderness travels more interesting. We recommend the following books:

- *Bear Attacks: Their Causes and Avoidance* by Stephen Herrero
- *Backcountry Bear Basics: The Definitive Guide to Avoiding Unpleasant Encounters* and *Don't Get Eaten: The Dangers of Animals that Charge or Attack* by Dave Smith
- *Bear Aware* by Bill Schneider